Set	Items	Description
S1	956151	(NEOPLAS? OR CANCER?) (S) TREAT?
S2	223	S1 AND (LIPID? (S) ENCAPSULAT?)
S3	119	S2 AND ADMINIST?
S4	67	RD (unique items)
S5	4	S4 AND (NUCLEIC OR POLYNUCLEOTIDE? OR OLIGONUCLEOTIDE?)

>>>KWIC option is not available in file(s): 41, 77, 399

5/3,K/1 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

06492482 Genuine Article#: YW835 No. References: 100
Title: Microspheres as a drug delivery system in cancer therapy
Author(s): Cummings J (REPRINT)
Corporate Source: WESTERN GEN HOSP,IMPERIAL CANC RES FUND, MED ONCOL UNIT/EDINBURGH EH4 2XU/MIDLOTHIAN/SCOTLAND/ (REPRINT)
Journal: EXPERT OPINION ON THERAPEUTIC PATENTS, 1998, V8, N2 (FEB), P 153-171
ISSN: 1354-3776 Publication date: 19980200
Publisher: ASHLEY PUBL LTD, 1ST FL, THE LIBRARY, 1 SHEPHERDS HILL HIGHGATE, LONDON, ENGLAND N6 5QJ
Language: English Document Type: REVIEW (ABSTRACT AVAILABLE)

Abstract: Microspheres are an example of a drug delivery system that has been evaluated extensively in *cancer* chemotherapy. They are essentially solid porous particles (1-100 mu m diameters) which can both target their drug cargo by physical trapping in blood vessels...

...the action of a therapeutic agent through controlled release. Microspheres can be made from a broad range of polymeric materials, including proteins, polysaccharides, polyesters and *lipids* by a variety of different techniques (emulsification, heat stabilisation, coacervation and phase inversion technology). Their diversity identifies the microsphere as a drug delivery system with...

...cytotoxic drugs (chiefly doxorubicin, mitomycin C, cisplatin and 5-fluorouracil) to achieve particular drug delivery profiles. However, it is dear that certain cytotoxic drugs are *encapsulated* in systems with pharmaceutical properties inappropriate for the particular mechanistic class. Also, studies demonstrating selective tumour targeting of cytotoxic drugs after systemic *administration* are rare. This review also focuses on the contribution that microspheres have made to delivery of immunomodulating cytokines, protein vaccines, antisense *oligonucleotides* and gene therapy. For these applications, new matrix materials such as bioadhesive polymers and more gentle methods of preparation have had to be developed to...

...and need further optimisation to overcome persistent instability problems. Microspheres are anticipated to contribute significantly in the future to the systemic, oral and loco-regional *treatment* of *cancer* with cytotoxic drugs and biological response modifiers.
...Identifiers--LOADED ALBUMIN MICROSPHERES; POLY(L-LACTIC ACID) MICROSPHERES; DOXORUBICIN QUINONE REDUCTION; IN-VIVO MECHANISM; MITOMYCIN-C; BIODEGRADABLE MICROSPHERES; TUMOR-TISSUE; ANTITUMOR-ACTIVITY; ANTISENSE *OLIGONUCLEOTIDES*; PERITONEAL CARCINOMATOSIS

5/3,K/2 (Item 1 from file: 71)

DIALOG(R)File 71:ELSEVIER BIOBASE

01415282 2000085103
Modulation of multidrug resistance in human leukemia cells with mdr1-targeted antisense *oligonucleotides* using variable treatment schedules
Dassow H.; Lassner D.; Remke H.; Preiss R.
ADDRESS: Dr. H. Dassow, Abteilung Klinische Pharmakologie, Universitat

Leipzig, Haertelstrasse 16-18, D-04107 Leipzig 653, Germany
Journal: International Journal of Clinical Pharmacology and Therapeutics, 38/4 (209-216), 2000, Germany
CODEN: ICTHE
ISSN: 0946-1965
DOCUMENT TYPE: Article
LANGUAGES: English SUMMARY LANGUAGES: English
NO. OF REFERENCES: 17

Modulation of multidrug resistance in human leukemia cells with mdr1-targeted antisense *oligonucleotides* using variable treatment schedules

Objective: The purpose of the current study was to characterize the effect of chimeric AS-ODNs *encapsulated* with cationic *lipids* on MDR in human leukemia cells and to determine if this modification of the ODN alone or in combination with the cationic *lipid* might offer advantages over classical ODN treatment with free unmodulated or phosphorothiolated AS-ODNs. Furthermore, we extended the antisense method to the use of AS...

...in drug-resistant human leukemia cells which exhibit the classic MDR phenotype at a moderate level was examined. Twenty-four hours after the last ODN *administration* the cells were analyzed for mdr1-mRNA (quantitative RT-PCR) and P170 expression (FCM), for R123 accumulation/efflux capacity (FCM) and for sensitivity to vincristine (MTT). In the parental drug-sensitive CCRF-CEM cells the mdr1- mRNA expression was assessed 24, 48 and 72 h after AS-ODN treatment *administered* as free phosphorothioate or conjugated with DMRIE-C. Results: Cationic *lipids* produced a clear increase in cellular ODN uptake but also caused an increase in variability of uptake rates (30% vs. 10% variability after free phosphorothioates...

DESCRIPTORS:
Multidrug resistance; Chimeric antisense *oligonucleotides*; Cationic lipids

CLASSIFICATION CODE AND DESCRIPTION:
87.4.1.15 - *CANCER* RESEARCH...

...*TREATMENT* /

5/3,K/3 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

13671831 PASCAL No.: 98-0379918
Delivery to cancer cells of antisense L-myc *oligonucleotides* incorporated in fusogenic, cationic-lipid-reconstituted influenza-virus envelopes (cationic virosomes)
WAELTI E R; GLUECK R
Institute of Pathology, University of Bern, Bern, Switzerland; Department of Virology, Swiss Serum and Vaccine Institute Bern, Bern, Switzerland
Journal: International journal of cancer, 1998, 77 (5) 728-733
Language: English

Delivery to cancer cells of antisense L-myc *oligonucleotides* incorporated in fusogenic, cationic-lipid-reconstituted influenza-virus envelopes (cationic virosomes)
Antisense oligodeoxy-nucleoside phosphorothioates (OPTs) of L-myc were *encapsulated* into reconstituted influenza-virus-A envelopes (virosomes). The envelopes of the virosomes consisted of a single positively charged (cationic) *lipid* bilayer. Binding of cationic virosomes to cellular receptors that are membrane glycoproteins or glycolipids containing terminal sialic acid is mediated by the hemagglutinin glycoprotein (HA...
... influenza virus. After internalization through receptor-mediated endocytosis, cationic virosomes fuse efficiently with the membranes of the

endosomal-cell compartment, and as a consequence the *encapsulated* OPT are delivered to the cell cytoplasma. Examination by fluorescence microscopy of the cellular uptake of cationic virosomes containing fluorescein-labeled OPT showed rapid and efficient incorporation of virosomes. Addition of cationic virosomes (75-150 mu l) containing antisense L-myc OPT in the picomolar range to small-cell-lung-*cancer* (SCLC) cell cultures that expressed highly the L-myc oncogene led to strong inhibition of thymidine incorporation in a concentration-dependent manner. Virosome-entrapped sense ...

... L-myc were not affected by antisense-L-myc virosomes. In Western-blot analysis, expression of L-myc protein was suppressed in the antisense-virosome-*treated* NCI-H209 cells but not in untreated control NCI-H209 cells. These results suggest that cationic virosomes may have great potential as an efficient delivery system for antisense *oligonucleotides* in *cancer* therapy.

English Descriptors: Small cell carcinoma; Bronchopulmonary; Established cell line; Antisense *oligonucleotide*; Organic thiophosphate; Antisense DNA; Protooncogene; C-Onc gene; Encapsulation; Influenzavirus A; Virus envelope; Delivery system; Antineoplastic agent; In vitro; Human

French Descriptors: Carcinome petite cellule; Bronchopulmonaire; Lignee cellulaire etablie; *Oligonucleotide* antisens; Thiophosphate organique; DNA antisens; Protooncogene; Gene onc cellulaire; Encapsulation; Influenzavirus A; Enveloppe virus; Systeme *administration*; Anticancereux; In vitro; Homme; Lignee NCI H209; Gene L myc; Lignee NCI H82; Virosome cationique

Spanish Descriptors: Carcinoma celula de avena; Broncopulmonar; Linea celular establecida; Oligonucleotido antisentido; Tiofosfato organico; DNA antisentido; Protooncogen; Gen onc celular; Encapsulacion; Influenzavirus A; Cubierta virus; Sistema *administracion*; Anticanceroso ; In vitro; Hombre

5/3,K/4 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01659683 SUPPLIER NUMBER: 18955792 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Respiratory syncytial virus infection in infants: a significant challenge for optimal care.
Bozzette, Maryann
Journal of Perinatal & Neonatal Nursing, v10, n2, p72(16)
Sep,
1996
PUBLICATION FORMAT: Magazine/Journal ISSN: 0893-2190 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional
WORD COUNT: 8233 LINE COUNT: 00706

... direct bearing on the development of strategies for controlling and preventing this infection. RSV is an enveloped, single-stranded RNA virus that has a symmetric *encapsulated* helix. A nucleocapsid core is surrounded by matrix proteins and a *lipid* envelope.(17) Genetically determined structural glycoproteins protrude on the surface. These proteins play an important role in the attachment and penetration of viruses into host...with RSV infection and documented wheezing or those who have underlying reactive airway disease are the best candidates. Caution is advised when these drugs are *administered*, however, because desaturation has occurred with albuterol as a result of perfusion imbalances caused by pulmonary vasodilatation.(30) Acidity and osmolarity of the nebulized solution...gene replication.(3,9) The drug is delivered via a small particle aerosol generator into an oxygen tent, hood, or ventilator circuit.(32)

Ribavirin inhibits *nucleic* acid synthesis, thus preventing viral protein synthesis. Ribavirin forms a ribavirin-5-monophosphate, which competitively inhibits guanosine. Arrest of viral replication results from

altered messenger...

...of the drug is deposited in the nasal passages in nonintubated infants, with only a fraction of the inhaled drug reaching the lower respiratory tract. *Administration* of aerosolized ribavirin to the lungs of mechanically ventilated infants results in more than twofold increase in the amount of drug deposited in lung tissue...

...and in those infants requiring mechanical ventilation.(3,34)

To be effective, ribavirin needs to be initiated within 72 hours of suspected infection and is *administered* over 12 to 18 hours/day for a total of 3 to 7 days.(33) The standard dosage of ribavirin is 20 mg/mL/day ...

...has been controversial because the majority of studies have demonstrated neither dramatic nor cost-effective results. Studies conducted before 1986, when the Food and Drug *Administration* first approved ribavirin, have been criticized for lack of consistent entry criteria, the use of ill-defined subjective clinical scoring systems, and no differences in...those with cardiac conditions and other high-risk children.

RSVIG is an expensive treatment; it requires skilled nursing care and just under 3 hours to *administer*. Preliminary studies recommend using a 750-g dose at 1-month intervals for the duration of the RSV peak season. RSVIG provides protection for the duration of *administration* but not immunity. It has been most successful in preventing RSV in infants with BPD. The results have been less encouraging in infants with cardiac... Monoclonal antibodies are versatile and can assist in the identification, tracking, and alteration of specific proteins. This genetic engineering technique is employed in the diagnosis, *treatment*, and prevention of diseases, such as certain types of *cancer*. Antibody fragments (Fates) targeting RSV are fragments of IgG that have a high binding affinity for RSV F proteins. Fabs are instilled directly into the...of aerosolized ribavirin in infants receiving mechanical ventilation for severe respiratory syncytial virus infection. NEngl J Med. 1991;325:24-29. (35.) Adams DA. Ribavirin *administration* via scavenger vacuum systems in the treatment of respiratory syncytial virus (RSV). JPediatr Nurs. 1994;9:51-54. (36.) Janai HK, Stutman HR, Zaleska M...
?

```
Set     Items   Description
S1          5   AU="MACLACHLAN, IAN"
S2          4   AU="MACLACHLAN IAN"
S3          9   S1 OR S2
S4          8   AU="GRAHAM, ROGER W." OR AU="GRAHAM, ROGER WALTER"
S5         47   AU="GRAHAM R W"
S6         13   AU="GRAHAM, R. W."
S7         68   S4:S6
S8          0   S7 AND S3
? s s7 or s3

              68  S7
               9  S3
      S9      77  S7 OR S3
? s s9 and lipid?

              77  S9
          573517  LIPID?
     S10       9  S9 AND LIPID?
? rd s10

>>>Duplicate detection is not supported for File 342.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S11       4  RD S10 (unique items)
? t s11/7/all


 11/7/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
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11941508   BIOSIS NO.: 199900187617
Stabilized plasmid-lipid particles: Construction and
  characterization.

AUTHOR: Wheeler J J; Palmer L; Ossanlou M; MacLachlan I; Graham R W;
  Zhang Y P; Hope M J; Scherrer P(a); Cullis P R
AUTHOR ADDRESS: (a)Inex Pharmaceuticals, 100-8900 Glenlyon Parkway,
  Burnaby, BC, V5J 5J8, Canada

JOURNAL: Gene Therapy  6 (2):p271-281 Feb., 1999
ISSN: 0969-7128
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A detergent dialysis procedure is described which allows
  encapsulation of plasmid DNA within a lipid envelope, where the
  resulting particle is stabilized in aqueous media by the presence of a
  poly(ethyleneglycol) (PEG) coating. These 'stabilized plasmid-lipid
  particles' (SPLP) exhibit an average size of 70 nm in diameter, contain
  one plasmid per particle and fully protect the encapsulated plasmid from
  digestion by serum nucleases and E. coli DNase I. Encapsulation is a
  sensitive function of cationic lipid content, with maximum
  entrapment observed at dioleoyldimethylammonium chloride (DODAC) contents
  of 5 to 10 mol%. The formulation process results in plasmid-trapping
  efficiencies of up to 70% and permits inclusion of 'fusigenic'
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      S5       4  S4 AND (NUCLEIC OR POLYNUCLEOTIDE? OR OLIGONUCLEOTIDE?)
?show files;ds;t/3,k/all
File   5:Biosis Previews(R) 1969-2002/Sep W1
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Set	Items	Description
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S2	223	S1 AND (LIPID? (S) ENCAPSULAT?)
S3	119	S2 AND ADMINIST?
S4	67	RD (unique items)
S5	4	S4 AND (NUCLEIC OR POLYNUCLEOTIDE? O